

## CLAIMS

1. Use of at least one acid-stable protease in animal feed wherein the protease has an identity of at least 70% to
  - 5 (a) SEQ ID NO: 1, and/or
  - (b) SEQ ID NO: 2.
2. Use of at least one acid-stable protease in the preparation of a composition for use in animal feed, wherein the protease has an identity of at least 70% to
  - 10 (a) SEQ ID NO: 1, and/or
  - (b) SEQ ID NO: 2.
3. The use of claim 1, wherein the dosage of the protease is 0.01-200 mg protease enzyme protein per kg feed.
- 15 4. The use of claim 2, wherein the intended dosage of the protease is 0.01-200 mg protease enzyme protein per kg feed.
5. A method for improving the nutritional value of an animal feed, wherein at least one
  - 20 acid-stable protease is added to the feed, and wherein the protease has an identity of at least 70% to
  - (a) SEQ ID NO: 1, and/or
  - (b) SEQ ID NO: 2.
- 25 6. An animal feed additive comprising
  - (a) at least one acid-stable protease; and
  - (b) at least one fat-soluble vitamin, and/or
  - (c) at least one water-soluble vitamin, and/or
  - (d) at least one trace mineral, and/or
  - 30 (e) at least one macro mineral;wherein the protease has an identity of at least 70% to
  - (i) SEQ ID NO: 1, and/or
  - (ii) SEQ ID NO: 2.

7. The animal feed additive of claim 6, wherein the amount of the protease corresponds to an intended addition of 0.01-200 mg protease protein per kg feed.

8. The animal feed additive of claim 6 or 7, which further comprises phytase, xylanase,  
5 galactanase, and/or beta-glucanase.

9. An animal feed composition having a crude protein content of 50-800 g/kg and comprising at least one acid-stable protease, wherein the protease has an identity of at least 70% to

- 10 (a) SEQ ID NO: 1, and/or  
(b) SEQ ID NO: 2.

10. The animal feed composition of claim 9, wherein the amount of the protease is 0.01-200 mg protease protein per kg feed.

15 11. A method for the treatment of vegetable proteins, comprising the step of adding at least one acid-stable protease to at least one vegetable protein or protein source, wherein the protease has an identity of at least 70% to

- 20 (a) SEQ ID NO: 1, and/or  
(b) SEQ ID NO: 2.

12. The method of claim 11, wherein soybean is included amongst the at least one vegetable protein source.

25 13. A method for improving the nutritional value of an animal feed, comprising adding to the animal feed at least one acid-stable protease which has an amino acid sequence having an identity of at least 70% to SEQ ID NO: 1.

14. The method of claim 13, wherein the dosage of the protease is 0.01-200 mg protease  
30 enzyme protein per kg animal feed.

15. The method of claim 13, wherein the protease has an amino acid sequence having an identity of at least 75% to SEQ ID NO: 1.

16. The method of claim 15, wherein the protease has an amino acid sequence having an identity of at least 80% to SEQ ID NO: 1.

17. The method of claim 16, wherein the protease has an amino acid sequence having an  
5 identity of at least 85% to SEQ ID NO: 1.

18. The method of claim 17, wherein the protease has an amino acid sequence having an identity of at least 90% to SEQ ID NO: 1.

10 19. The method of claim 18, wherein the protease has an amino acid sequence having an identity of at least 95% to SEQ ID NO: 1.

20. A method for improving the nutritional value of a vegetable protein, comprising adding at least one acid-stable protease to the vegetable protein or protein source, wherein the protease  
15 comprises the amino acid sequence of SEQ ID NO: 1.

21. The method of claim 20, wherein the vegetable protein source comprises soybean.

22. The method of claim 20, wherein the protease has an amino acid sequence having an  
20 identity of at least 75% to SEQ ID NO: 1.

23. The method of claim 22, wherein the protease has an amino acid sequence having an identity of at least 80% to SEQ ID NO: 1.

25 24. The method of claim 23, wherein the protease has an amino acid sequence having an identity of at least 85% to SEQ ID NO: 1.

25. The method of claim 24, wherein the protease has an amino acid sequence having an identity of at least 90% to SEQ ID NO: 1.

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26. The method of claim 25, wherein the protease has an amino acid sequence having an identity of at least 95% to SEQ ID NO: 1.